

when a touch is detected over the displayed media items. The activation of the virtual scroll wheel includes displaying and enabling the functionality of the virtual scroll wheel, the virtual scroll wheel providing a touch region where a user swirls their finger in order to traverse through the group of media items. The method additionally includes determining if a touch event is performed relative to the touch region of the virtual scroll wheel. Moreover, the method includes scrolling through the group of media items when a scrolling touch event is performed.

[0018] The invention relates, in one embodiment, to a method performed on a user operated electronic device having a display and a touch screen. The method includes determining if a touch is detected. The method also includes monitoring and analyzing the current operating conditions when a touch is detected. The method also includes activating a first GUI element for a first set of operating conditions. The method additionally includes activating a second GUI element for a second set of operating conditions.

[0019] The invention relates, in one embodiment, to a method performed on a computing device having a display and a touch sensing input device. The method includes sensing touches. The method also includes displaying and enabling a GUI element when a touch is detected. The GUI element is based on at least one of the following: (a) the application currently running on the computing device; (b) the current state of the application; and/or (c) one or more characteristics of the touch. The characteristics include, for example, touch location, touch ID, number of touches, and touch motion. The method further includes disabling and removing the GUI element from display when one of the following events occurs: (a) the touch is no longer detected, (b) a touch has not been detected for a preset amount of time, (c) a certain amount of time has gone by since the step of displaying and enabling, (d) a user selection.

[0020] The invention relates, in another embodiment, to a computing system. The computing system includes a display device configured to display a graphical user interface. The system also includes a touch screen positioned over the display device. The touch screen is configured to detect touches that occur over the display device. The system further includes a processor operatively coupled to the display device and the touch screen. The processor instructs the display device to display one or more GUI elements in response to a touch, and performs actions associated with the GUI element when touch events are detected relative to the displayed GUI elements.

[0021] The invention relates, in another embodiment, to a computing device. The computing device includes a processor. The computing device also includes a touch screen capable of sensing touch events. The computing device further includes a display configured to simultaneously display a plurality of media items and a virtual scroll wheel. The virtual scroll wheel provides a region where touch events are performed in order to implement a scrolling action. The scrolling action allows a user to traverse through the plurality of media items.

[0022] Other aspects and advantages of the invention will become apparent from the following detailed description, taken in conjunction with the accompanying drawings, illustrating by way of example the principles of the invention.

BRIEF DESCRIPTION OF THE DRAWINGS

[0023] The invention will be readily understood by the following detailed description in conjunction with the accompanying drawings, wherein like reference numerals designate like structural elements, and in which:

[0024] FIG. 1 is a block diagram of a computer system, in accordance with one embodiment of the present invention.

[0025] FIG. 2 is a multipoint processing method, in accordance with one embodiment of the present invention.

[0026] FIGS. 3A and B illustrate an image, in accordance with one embodiment of the present invention.

[0027] FIG. 4 illustrates a group of features, in accordance with one embodiment of the present invention.

[0028] FIG. 5 is a parameter calculation method, in accordance with one embodiment of the present invention.

[0029] FIGS. 6A-6G illustrate a rotate gesture, in accordance with one embodiment of the present invention.

[0030] FIG. 7 is a diagram of a touch-based method, in accordance with one embodiment of the present invention.

[0031] FIG. 8 is a diagram of a touch-based method, in accordance with one embodiment of the present invention.

[0032] FIG. 9 is a diagram of a touch-based method, in accordance with one embodiment of the present invention.

[0033] FIG. 10 is a diagram of a zoom gesture method, in accordance with one embodiment of the present invention.

[0034] FIGS. 11A-11H illustrates a zooming sequence, in accordance with one embodiment of the present invention.

[0035] FIG. 12 is a diagram of a pan method, in accordance with one embodiment of the present invention.

[0036] FIGS. 13A-13D illustrate a panning sequence, in accordance with one embodiment of the present invention.

[0037] FIG. 14 is a diagram of a rotate method, in accordance with one embodiment of the present invention.

[0038] FIGS. 15A-15C illustrate a rotating sequence, in accordance with one embodiment of the present invention.

[0039] FIG. 16 is a diagram of a GUI operational method, in accordance with one embodiment of the present invention.

[0040] FIGS. 17A-17E illustrate a floating control sequence, in accordance with one embodiment of the present invention.

[0041] FIG. 18 is a diagram of a GUI operational method, in accordance with one embodiment of the present invention.

[0042] FIGS. 19A-19D illustrate a zooming target sequence, in accordance with one embodiment of the present invention.

[0043] FIG. 20 is a diagram of a GUI operational method, in accordance with one embodiment of the present invention.

[0044] FIGS. 21A-21D illustrate a page turning sequence, in accordance with one embodiment of the present invention.